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TABLE OF ABBREVIATIONS

Abbreviation	Description
WSOU	Plaintiff WSOU Investments, LLC d/b/a Brazos License and Development
Google	Defendant Google LLC
'563 patent	U.S. Patent No. 7,304,563
'806 patent	U.S. Patent No. 8,041,806
'681 patent	U.S. Patent No. 8,238,681
Group 4 Patents	Collectively, U.S. Patent Nos. 7,304,563; 8,041,806; and 8,238,681
AF	Autofocus
DPI	Deep Packet Inspection
IPTV	Internet Protocol Television
ISP	Internet Service Provider
POSITA	Person Of Ordinary Skill In The Art

** Emphasis added unless indicated otherwise.*

*** For the Court's convenience, Google cites to WSOU's opening brief by referring to the pagination generated by CM/ECF (at the top of the page) rather than the pagination at the bottom of the page.*

I. THE '563 PATENT (CASE NO. 6:20-CV-00581)

The '563 patent, entitled “alarm clock,” relates to a mobile communication terminal with a clock and memory that can store an alert time, and issue two types of alarms—one local and one remote resulting from a connection to another terminal. (Ex. 1 at Abstract.)

A. “alert” (claims 1, 12, 16)

Google’s Construction	WSOU’s Construction
instructions causing a communication terminal to perform an action	plain and ordinary meaning

The '563 patent uses the terms “alert” and “signal,” both of which could be used to refer to a sound that gets a person’s attention. The claim language and the specification, however, make clear that the patentee acted as a lexicographer by defining the term “alert” in the context of the '563 patent as the set of instructions causing the actions that result in a sound, not the sound itself.

First, the claim language requires both an “alert” and a “signal,” indicating that the two terms are not interchangeable and must have different meanings. *Helmsderfer v. Bobrick Equip., Inc.*, 527 F.3d 1379, 1382 (Fed. Cir. 2008) (“[D]ifferent claim terms are presumed to have different meanings.”). For example, claim 1 requires “an alerting unit configured to issue an *alert*” in one of two ways: (1) “by initiating a connection to another communication terminal over a network so as to cause that other terminal to locally *signal* the incidence of the connection incoming thereto” or (2) “by causing the signaling unit to locally *signal* to the user.” (Ex. 1 at 5:50-54, 5:57-58.) Thus, the claim language demonstrates that the “alert” is not the sound emitted by a terminal at a particular time, it is the information to be conveyed; the sound is not the information (or “alert”), rather, the sound is the “signal.” The “alert” is what *causes* that signal to occur on a particular terminal at that time. In other words, the claimed “alert” instructs the mobile communication terminal to take an action—either to initiate a connection to another

terminal resulting in a signal on that other terminal or to cause local hardware to signal.

The “alert” in the ’563 patent can be thought of as analogous to an amber alert. An amber alert is not a sound played to get a person’s attention. Rather, an amber alert is the instructions that cause numerous devices to: (1) emit that sound, and (2) display certain information about a missing child. Just like issuing an amber alert is the execution of instructions that cause signals on many devices, issuing an alert in the ’563 patent is the execution of instructions causing a signal on a particular terminal

Second, the specification further supports Google’s construction. The ’563 patent describes the invention in terms of an “alarm clock facility” on a mobile phone and discloses two “types of alarms” corresponding to the two signals caused by the “alert.” (*Id.* at 3:4–5, 4:65–67 (the first type of alarm is activated “by causing the loudspeaker to emit a noise”), 4:9–10 (the second type of alarm is “generated by means of a call to another phone”).) The ’563 patent then explains the alarm instructions¹ that the user selects to customize the signals: time and date for alarm activation (*id.* at 3:55–57); whether and how the alarm signals locally (*id.* at 4:1–9); whether and how the alarm signals remotely (*id.* at 4:9–27); whether and when the local and remote signals are to be sounded (*id.* at 4:47–58); whether the alarm will cause repeated remote signals and the duration and frequency of the signal (*id.* at 4:54–59); and which remote device (or devices) will signal, and in what order (*id.* at 5:12–15). According to the inventors, these instructions cause the communication terminal to perform the actions resulting in the two signals recited in the claims.

¹ Contrary to WSOU’s assertion, the fact that the specification does not specifically use the word “instructions” does not require rejection of Google’s construction. (Dkt. 33 at 8.) A POSITA reading this section of the specification would understand the settings entered by a user for a particular alarm are a set of instructions executed when that alarm is activated.

Contrary to WSOU’s assertion, Google’s construction neither imports limitations into the claim nor leads to nonsensical results. (Dkt. 33 at 8.)² Google construes “alert” in context of the claim language, which makes clear that the only instructions that are relevant are those that cause the two actions recited in the claims—initiating a connection to another terminal or causing a local signal. *Wasica Fin. GmbH v. Cont’l Auto. Sys., Inc.*, 853 F.3d 1272, 1288 (Fed. Cir. 2017) (“[T]he context of the surrounding words of the claim also must be considered in determining the ordinary and customary meaning of terms.”). Indeed, WSOU’s “plain and ordinary meaning” construction leads to a nonsensical result that conflates the distinct claim terms “alert” and “signal.” Finally, WSOU points to a reference in the specification where an “alerting device” provides an “alarm,” but it fails to explain how this undermines Google’s construction of “alert.” (Dkt. 33 at 9) It does not. The terms “alerting device” and “alarm” do not appear in the claims.

B. “initiating [a/the] connection to the other communication terminal at a predetermined time offset from [signaling the user using the signaling unit/locally signaling the users/signaling the user by the signaling means]” (claims 1, 12, 16)

Google’s Construction	WSOU’s Construction
initiating a link that allows direct communication between a mobile communication terminal and another predefined communication terminal at a time set apart by a predefined interval from the local signal	plain and ordinary meaning

The ’563 patent relates to two types of alarms using two different terminals—the first alarm is a local signal on terminal A; and the second alarm is a local signal on terminal B that is caused by terminal A connecting to terminal B. This term relates to the second type of alarm. Google’s construction should be adopted for three reasons: (1) it gives meaning to the term

² For the Court’s convenience, Google cites to WSOU’s opening briefs by referring to the pagination generated by CM/ECF (at the top of the page) rather than the pagination at the bottom of the page.

“connection” within the context of this phrase and the ’563 patent; (2) it clarifies the antecedent basis for “the other communication terminal”; and (3) it gives meaning to the coined term “predetermined time offset” in the context of this patent.

First, the intrinsic evidence demonstrates that the claimed “connection” requires direct communication between the two terminals. A plain reading of the claim language requires that terminal A be able to communicate directly with terminal B, and it is that direct communication that causes the local signal on terminal B. Specifically, the claims require that terminal A initiates a connection with terminal B, and that connection causes a local signal on terminal B. (Ex. 1 at (claims 1, 12, 16).) The connection discussed in the specification is a phone call, which allows direct communication between two phones. (*Id.* at 2:29-30.) While the claims may not be limited to the preferred embodiment, the specification does not disclose or even contemplate indirect connections where terminal A must go through an intermediary device or terminal to communicate with terminal B. (*See id.* at 2:48-52 (the communication terminal generates an “audible message” and “is arranged to play out that message over the connection” to the other terminal).) As the Federal Circuit has long instructed, courts “cannot look at the ordinary meaning of the term [] in a vacuum. Rather, *we must look at the ordinary meaning in the context of the written description.*” *DeMarini Sports, Inc. v. Worth, Inc.*, 239 F.3d 1314, 1324 (Fed. Cir. 2001). Here, construing this claim phrase to require “direct communication” between the two terminals clarifies the scope of the claim in light of the specification.

Second, both the claim language and the specification confirm that the “other communication terminal” must be predefined, or preselected, by the user. WSOU agrees that the claims require the initiation of a connection from one communication terminal “to another communication terminal over a network.” (Dkt. 33 at 13.) That is the antecedent basis for the

“other communication terminal” in this term. It is common sense that in order to initiate a connection from one terminal to another terminal, the identity of that other terminal must be known in advance. As the specification confirms, the user must select another terminal when setting up the second type of alarm. (Ex. 1 at 3:8 (“but also calls a *pre-defined* telephone number”); 4:10-12 (“[T]he user can *select a telephone number* for use in the second type of alarm. The telephone number is *stored* in non-volatile memory 21.”); 4:38-40 (“Using the second type of alarm call the user can have the phone 1 make an alarm call to a *phone number of his choosing* at a predetermined time.”); 4:41-45 (“The phone may *store a default telephone number* for use in the second type of alarm. The user may *select a telephone number* for use in the second type of alarm either by *entering it digit-by-digit or by selecting it from a list of numbers* stored in the memory of the phone....”); 5:4-5 (“The *phone number entered* for the alarm of the second type....”); 5:13-14 (“[T]he phone could allow multiple phone numbers *to be selected* for the second type of alarm.”).) The specification does not disclose any embodiment in which the user does not pre-define the other communication terminal to which terminal A will initiate a connection for an alarm of the second type.³ Although the ’563 patent indicates that it is possible to initiate a connection to multiple terminals, those terminals are still individually pre-selected by the user. (*Id.* at 5:12-15.) Thus, the ’563 patent clearly does not contemplate an embodiment by which connections are “initiated” indiscriminately to any device merely capable of receiving that communication.

Third, “predetermined time offset” requires construction because it is a coined term and

³ Indeed, the specification notes that “[p]referably, the alarm of the second type is not activated by default whenever a user sets up an alarm. This avoids the possibility that the phone will call a default alarm phone number when the user is not at a location where he can answer calls to that number.” (Ex. 1 at 4:64-67.) But even in the case of a default setting for the second type of alarm, the other terminal is pre-defined.

“offset” cannot have its plain and ordinary meaning as used here. The word “offset” typically means to counterbalance or compensate for something (*e.g.*, losses in one category are *offset* by gains in another). Clearly, the patentee did not intend for the word “offset” to mean that here—it does not make sense in the context of the claim language. The specification describes multiple alarms in which one alarm occurs “*e.g.*, one or two minutes later,” and explains that the user can “set various options such as ... the length of time between calling and the phone alarm going off.” (*Id.* at 4:49-51, 4:54-59.) The “length of time” can be “shortened/adjusted based on the time required to answer previous alarms.” (*Id.* at 4:59-62.) This shows that by “predetermined time offset,” the patentee was referring to a time set apart by an interval, such as one or two minutes, and that interval must be predefined by the user when setting up the alarms.

C. “the terminal” (claim 12)

Google’s Construction	WSOU’s Construction
indefinite	plain and ordinary meaning

Claim 12 is indefinite because it plainly requires two different terminals—a “mobile communication terminal” (Ex. 1 at 6:37-38) and “another communication terminal” (*id.* at 6:43-44)—yet it twice recites “*the* terminal” without any antecedent basis thereby failing to provide “reasonable certainty ... about the scope of the invention.” *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 901 (2014).

First, after identifying both a “mobile communication terminal” and “another communication terminal,” claim 12 recites “issuing an alert by *the terminal* locally signaling to the user.” From this language, it is impossible to determine whether “the terminal” refers back to the “mobile communication terminal” (that alerts a user) or the “another communication terminal” (that locally signals), and there are no other “terminals.” WSOU asserts that “the terminal” derives antecedent basis from the “another communication terminal” because that

terminal appears “immediately above” in the claim language. (Dkt. 33 at 14.) Yet, it could just as easily be the “mobile communication terminal,” because the ’563 patent explains that the “another communication terminal” is not necessarily local to the user. (Ex. 1 at 5:3-9 (“The alarm function as described above can also be used to wake people who are at different locations.... The alarm of the first type can then wake someone at the location of the phone, and the alarm of the second type can wake someone at the remote location.”).) When located remotely, the “another communication terminal” cannot “locally signal[] the user,” thereby indicating that “the terminal locally signaling the user” could also refer to the “mobile communication terminal.”

Moreover, claim 12 also requires that “the other terminal” issue an alert at a “predetermined time offset from locally signaling to the user.” (*Id.* at 6:51-53.) The antecedent basis for this term is presumably “another communication terminal,” which further demonstrates that “the other terminal” is not locally signaling to the user, and that “the terminal locally signaling to the user” could refer to the “mobile communication terminal.” Thus, a plain reading of the claim language in view of specification yields conflicting and inconsistent conclusions. A POSITA is “left to wonder” which of the communication terminals is “the terminal.” *See Bushnell Hawthorne, LLC v. Cisco Sys., Inc.*, 813 F. App’x 522, 526 (Fed. Cir. 2020) (holding “said different IP Address” indefinite when the claim identified three different IP addresses, none of which was identified as “different”).

Second, claim 12 describes “storing an indication in the memory of whether the alert is to be issued locally by *the terminal*.” (Ex 1 at 6:49-50.) This second use of “the terminal” is also indefinite for lack of antecedent basis. The “storing” limitation indicates that there is a question

as to whether “the alert” will be issued locally by “the terminal.”⁴ The previous “issuing” limitation defines “the terminal” as the one locally signaling to the user. Thus, contrary to WSOU’s assertion, it is unclear whether both instances of “the terminal” refer to the same terminal. (Dkt. 33 at 14.) Indeed, WSOU’s interpretation makes no sense and demonstrates the multiple ways in which this claim is indefinite for lack of antecedent basis. WSOU claims that “‘the memory’ derives its antecedent basis from ‘a memory’ of ‘a mobile communication terminal’” but that “the terminal” in that same limitation derives its antecedent basis from “another communication terminal.” (*Id.*)

As the Federal Circuit has “repeatedly and consistently” stated, the Court may not re-write the claim to sustain its validity. *Chef Am., Inc. v. Lamb-Weston, Inc.*, 358 F.3d 1371 (Fed. Cir. 2004) (collecting cases). If, as WSOU claims, by “the terminal” the patentee had meant “the other terminal,” the claim could have been drafted that way. Likewise, if the patentee had meant “mobile communication terminal,” he could have written that. He did neither. As a result, Claim 12 is hopelessly indefinite.

D. “issuing means for issuing an alert” (Claim 16)

Google’s Construction	WSOU’s Construction
indefinite	antenna, communication engine and loudspeaker, and equivalents thereof

The sole dispute is whether the ’563 patent discloses corresponding structure to perform the function of “issuing an alert.” (Dkt. 33 at 14.) Claim 16 states that the “issuing means” performs the function of “issuing an alert” in two ways: (1) “by initiating a connection to another communication terminal over a network” (Ex. 1 at 7:2-3), or (2) “by causing the signaling means

⁴ The reference to “the alert” in this limitation only compounds the confusion as to which terminal is “the terminal” being described, because there are also multiple “alerts” being issued in this claim, and this term also lacks antecedent basis.

to locally signal to the user” (*id.* at 7:8-10). “Where there are multiple claimed functions, as there are in this case, the patentee must disclose adequate corresponding structure to perform all of the claimed functions.” *Media Rights Techs., Inc. v. Capital One Fin. Corp.*, 800 F.3d 1366, 1374 (Fed. Cir. 2015). The ’563 patent fails to disclose sufficient structure for either.

The only passage that WSOU cites as structure for the first way of issuing an alert discloses “an antenna 19 and a communication engine 20” that is “connected between the antenna and the processor.” (Dkt. 33 at 15 (citing Ex. 1 at 3:32-42).) This passage, however, merely provides the location of the communication engine and describes it in purely functional language, stating what it does *rather than how it does it*. Such “high level” disclosure of results to be obtained, but no detail as to how to perform the operation to achieve those results, does not satisfy Section 112, ¶ 6. *In re Aoyama*, 656 F.3d 1293, 1298 (Fed. Cir. 2011). Likewise, Figure 1 does not identify any structure for the communication engine, simply depicting it as an empty box 20. (Ex. 1.) That too is insufficient. A patent fails to provide adequate structure when it discloses only a “black box that performs [the] recited function. But how it does so is left undisclosed.” *Blackboard, Inc. v. Desire2Learn Inc.*, 574 F.3d 1371, 1383 (Fed. Cir. 2009).

Moreover, nothing in this passage relates to the claimed function of “issuing an alert . . . by initiating a connection to another communication terminal over a network.” (Ex. 1 at 7:1-3.) “To meet the definiteness requirement, structure disclosed in the specification must be clearly linked to . . . the function claimed.” *Default Proof Credit Card Sys., Inc. v. Home Depot U.S.A., Inc.*, 412 F.3d 1291, 1299 (Fed. Cir. 2005); *Digital Retail Apps, Inc. v. HEB, LP*, No. 6-19-CV-00167-ADA, 2020 WL 376664, at *3 (W.D. Tex. 2020) (same).

At most, WSOU’s cited passage shows that the disclosure is a general-purpose computer given that “[a]t least some functional elements of the communication engine may be

implemented on a common chip with one or more parts of the central processing unit.” (Ex. 1 at 3:32-42.) That is insufficient because the disclosed structure must be a “special purpose computer programmed to perform the disclosed algorithm.” *WMS Gaming, Inc. v. Int’l Game Tech.*, 184 F.3d 1339, 1349 (Fed. Cir. 1999); *see Aristocrat Techs. v. Int’l Game Tech.*, 521 F.3d 1328, 1333 (Fed. Cir. 2008) (requiring “the structure disclosed in the specification be more than simply a general purpose computer or microprocessor”). Neither WSOU’s cited passage, nor anything in the patent, describes a structure or algorithm for “issuing an alert by initiating a connection to another communication terminal over a network.”

WSOU’s purported structure for the second way of issuing an alert is similarly deficient. Claim 1 provides that the “means for issuing an alert comprises signaling means for locally signaling to a user.” (Ex. 1 at 7:6-7.) The parties agree that a loudspeaker is the structure by which the “signaling means” locally signal[s] to the user.” (Dkt. 33 at 8 (citing Ex. 1 at 2:57-58, 4:4-8).) WSOU attempts to recycle the same passages as structure for the “issuing means.” However, the “issuing means” does not perform the function of “locally signaling to the user”—that is the job of the signaling means. WSOU thus cannot point to any structure tied to the function of “issuing an alert *by causing the signaling means* to locally signal to the user.”

E. “alerting unit configured to issue an alert” and “signaling unit configured to locally signal to a user” (claim 1)

Google’s Construction	WSOU’s Construction
Section 112, ¶ 6 applies. Function: issuing an alert Structure: indefinite	plain and ordinary meaning
Section 112, ¶ 6 applies. Function: locally signaling to a user Structure: loudspeaker and equivalents thereof (2:57-58, 4:4-8).	plain and ordinary meaning

WSOU urges a “plain and ordinary meaning” construction for these two terms, but the claim language and specification demonstrate that “alerting unit” and “signaling unit” do not connote any known structure to a POSITA. Rather, the intrinsic evidence establishes that Section 112, ¶ 6 applies because: (i) the generic word “unit” is interchangeable with “means,” and (ii) the functional adjectives “alerting” and “signaling” do not supply any structure.

The Federal Circuit and district courts routinely hold that terms such as “alerting unit” and “signaling unit” are mean-plus-function limitations because “unit” is a classic nonce word and merely adding functional prefixes—such as “alerting” or “signaling”—does not provide structure to perform the recited functions. *See Diebold Nixdorf, Inc. v. ITC*, 899 F.3d 1291, 1297-1299 (Fed. Cir. 2018) (holding that “cheque standby unit” is a means-plus-function limitation); *Dyfan v. Target Corp.*, 6:19-cv-179-ADA, Dkt. 57 at 20 (W.D. Tex. 2020) (“broadcast short-range communications unit” did not “constitute sufficient structure to perform recited function”); *Canon, Inc. v. TCL Elecs. Ltd.*, 2020 WL 2098197, at *25-28 (E.D. Tex. 2020) (construing “connection unit,” “detection unit,” and “communication unit” as means-plus-function terms); *Va. Innov. Sci., Inc. v. Amazon.com, Inc.*, 2019 WL 4259020, at *24 (E.D. Tex. 2019) (same for “signal conversion unit”). As one court has reasoned: “A ‘unit’ could be almost anything. For example, when the function of an element is ‘to reproduce,’ it adds nothing to say that the structure is ‘a reproducing unit’; it is simply a restatement of the function.” *LG Elecs., Inc. v. Quanta Comp. Inc.*, 2008 WL 4613054, *2 (W.D. Wis. 2008). The same is true here.

The intrinsic record rebuts the presumption created by the absence of the word “means.” *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1349 (Fed. Cir. 2015). First, both terms are drafted in classic means-plus-function format, with the nonce word “unit” used as a placeholder for the term “means.” And this District “reject[s] the argument that replacing the word ‘means’

with ‘unit’ or ‘device’ takes the limitations outside the bounds of Section [112 ¶ 6].” *Via Vadis, LLC v. Buffalo Am., Inc.*, 2016 WL 5239626, at *5 (W.D. Tex. 2016). Further, the language recited after the “alerting unit” and “signaling unit” is purely functional and identical to the functions for “issuing means” and “signaling means.” (Ex. 1 at 5:47-58, 7:6-7.) The claim language requires that the “alerting unit” issues an alert, and the “signaling unit” locally signals to a user—both are defined *only* by the function they perform. *See Diebold*, 899 F.3d at 1298 (applying Section 112, ¶ 6 when “the claims describe the term ‘cheque standby unit’ solely in relation to its function”); *Dyfan*, 6:19-cv-179-ADA, Dkt. 57 at 19.

Second, the addition of the modifiers “alerting” and “signaling” to the nonce term “unit” fails to connote any specific structure. *See Media Rights*, 800 F.3d at 1373 (“We have never found that the term ‘mechanism’—without more—connotes an identifiable structure; certainly, merely adding the modifier ‘compliance’ to that term would not do so either.”); *Williamson*, 792 F.3d at 1351 (“The prefix ‘distributed learning control’ does not impart structure into the term ‘module.’”). Here, “[n]o adjective endows the claimed [units] with a physical or structural component.” *Welker Bearing Co. v. PHD, Inc.*, 550 F.3d 1090, 1096, (Fed. Cir. 2008).

Contrary to WSOU’s assertion, a POSITA would not understand these terms to refer to a known structure. (Dkt. 33 at 10-11.) The specification’s disclosure of a “mobile phone compris[ing] a central processor unit” or “processor” does not connote a known structure for the claimed “alerting unit” or “signaling unit.” (Ex. 1 at 3:21, 3:58-67, 4:18-20.) This Court makes clear that simply “reciting a ‘mobile device’—and the associated processor therein by implication—does not add any additional structure...” and “the Court does not consider the mobile device to provide sufficient structure.” *Dyfan*, 19-cv-179-ADA, Dkt. 57 at 20, n.4. Section 112, ¶ 6 should apply.

WSOU's citations to exemplary embodiments of how a "signaling unit" signals locally confirm the application of Section 112, ¶ 6: **"means of the loudspeaker"** and **"by means of a light or vibrating unit."** (Dkt. 33 at 12 (citing Ex. 1 at 4:4-8).) Google agrees that this passage from the specification discloses structure for the "signaling means." Google's position is that "signaling unit" and "signaling means" have the same corresponding structure. Importantly, the fact that the '563 patent discloses structure corresponding to the "signaling unit" for purposes of the second step of the means-plus-function analysis does not alter the conclusion that "signaling unit" is a means-plus-function limitation. *See MTD Prods. Inc. v. Iancu*, 933 F.3d 1336, 1344 (Fed. Cir. 2019) ("That the specification discloses a structure corresponding to an asserted means-plus-function claim term does not necessarily mean that the claim term is understood by persons of ordinary skill in the art to connote a specific structure."). Additionally, for the same reasons discussed with respect to "issuing means for issuing an alert," the '563 patent fails to disclose corresponding structure for "alerting unit."

II. THE '806 PATENT (CASE NO. 6:20-CV-00572)

The '806 patent relates to the "control of electronic content delivery to subscribers in communication networks based on subscriber behaviors." (Ex. 2 at 1:7-10.) As the '806 patent explains, "[a]ll communication traffic exchanged with a communication network subscriber over an access communication link that enables the subscriber to access electronic content is monitored, and behavioral information indicative of behavior of the subscriber in using the access communication link is collected from the monitored communication traffic." (*Id.* at Abstract.)

A. "communication traffic exchanged with a communication network subscriber over an access communication link" (claims 1, 9, 10, 11, 14)

Google's Construction	WSOU's Construction
the digital information traversing a network link between a communication network subscriber and an access network	plain and ordinary meaning

Google's proposed construction follows directly from the specification and prosecution history. First, Google's construction clarifies the scope of "communication traffic" in a manner consistent with the specification and the understanding of a POSITA. Each independent claim recites that communication network subscribers are provided with an Internet Protocol Television ("IPTV") service, which requires the communication of packet data. (Ex. 2 claims 1, 9-11, 14; Ex. 4 (defining "Internet Protocol" as "[t]he protocol within TCP/IP that governs the *breakup of data messages into packets, the routing of the packets* from sender to destination network and station, *and the reassembly of the packets* into the original data messages at the destination.").) And while the specification states that different *types* of communication traffic are monitored (*e.g.*, email traffic), the only *form* of communication traffic disclosed is "packet traffic." (Ex. 2 at 2:66-3:3, 6:36-47, 9:19-28.) Because a POSITA would understand that packet traffic is digital information, Google's use of "digital information" is consistent with the plain and ordinary meaning of the disputed term.

Second, the remainder of Google's construction—"traversing a network link between a communication network subscriber and an access network"—is both anchored in and compelled by the intrinsic record. The independent claims recite that the communication traffic being monitored is "***exchanged with a communication network subscriber over an access communication link.***" The specification consistently and exclusively identifies the "access communication link" as the network link "26" between the subscriber and the access network. (Ex. 2 at Fig 2 (annotated below), 5:36-38 ("FIG. 2 includes a *subscriber system 22*, which is *operatively coupled to an access network 24 through an access communication link 26.*").) The

'806 patent further explains that “subscriber 22” establishes the “access connection 26” to access services offered by the “access network 24.” (*Id.* at 7:26-33.) According to the inventors, “[i]nteractions between the subscriber 22 and the electronic content source 58 are enabled by the access communication link 26 through the access network 24. The access network 24 might provide the subscriber 22 with access to the Internet, for example.” (*Id.* at 7:60-65.) Simply put, the intrinsic record does not disclose the existence of an “access communication link” in any location other than between the communication network subscriber and the access network.

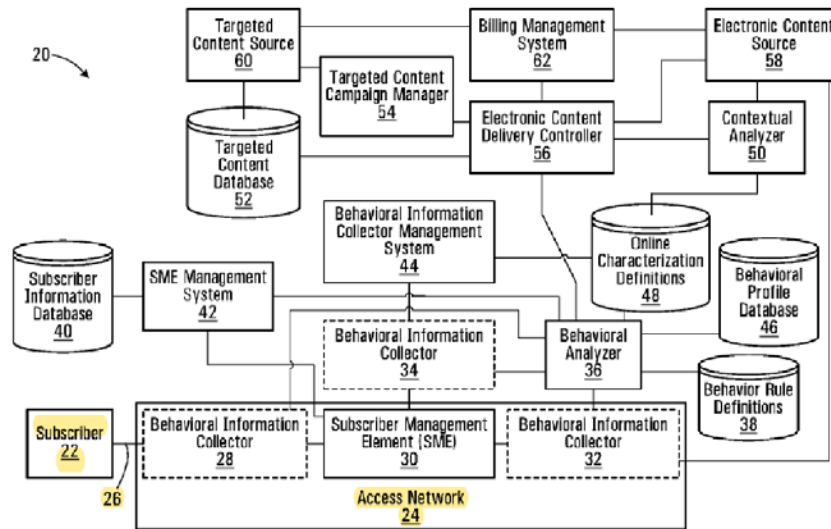


FIG. 2

The specification also explains that the communication traffic is monitored as it is being “exchanged” with the communication network subscriber – *i.e.*, as it traverses the access communication link. (*Id.* at 7:65-67 (“In a typical ISP scenario, *all of the online traffic that is exchanged with the subscriber 22 traverses the access communication link 26.*”), 8:14-17 (“*The main function of a behavioral information collector, whether deployed at an inline position 28, 32, or an offline position 34, is to monitor all communication traffic flows of the subscriber 22.*”), 13:19-22 (“Since the subscriber’s online traffic *traverses* the access network 24, the traffic is being monitored by the behavioral information collector 28, 32, 34.”).) This fully aligns with

the prosecution history, where the applicant distinguished prior art on the basis that it suggested “tracking of user actions *through a specific Web server*, rather than collecting behavioral information from communication traffic.” (Ex. 3 at 10 at 10.) Moreover, extrinsic evidence supports Google’s construction by demonstrating that a POSITA would understand “traffic” as information in transit (*i.e.* traversing) a network link. (Ex. 4 (defining “traffic” as “[t]he load carried by a communications link or channel” and “load” as “[i]n communications, *the amount of traffic on a line*”); Ex. 5 (defining “traffic” as “term covering all the messages and other signals processed by a system or *carried by a communications link*”); Ex. 6 (defining “traffic” as “[t]he *volume of data being transmitted* over a communications network at a given moment”).)

WSOU’s arguments that Google improperly limits the claims are without merit. (Dkt. 33 at 13-14.) First, WSOU avoids the relevant portions of the intrinsic record by relying solely on Figure 1, which does not even identify an “access communication link.” (Ex. 2 at Fig. 1.) Second, the ’806 patent makes clear that the access communication link exists only as a direct connection between the subscriber and the access network. Third, as shown in Figure 2, the “access communication link” is connected directly to the “access network,” thus placing that network link “in” the access network itself.

B. “access network” (claims 1, 7, 9, 10, 11, 14)

Google’s Construction	WSOU’s Construction
a network that connects a communication network subscriber to their Internet Service Provider (ISP)	plain and ordinary meaning

The focus of the parties’ dispute is the scope of this term, and Google’s construction is consistent with the intrinsic evidence. The ’806 patent is replete with teachings establishing that the “access network” is the network that connects a subscriber to its Internet Service Provider (“ISP”). Wrongly contending that Google’s construction is too restrictive (Dkt. 33 at 19),

WSOU ignores relevant parts of the intrinsic record. The Court should resolve this dispute and adopt Google’s construction, which sets forth the proper scope of “access network.” *See O2 Micro Int’l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1362 (Fed. Cir. 2008). “As [the Federal Circuit] ha[s] held repeatedly, when the parties raise an actual dispute regarding the proper scope of these claims, the court, not the jury, must resolve that dispute.” *Omega Patents, LLC v. CalAmp Corp.*, 920 F.3d 1337, 1346 (Fed. Cir. 2019)

First, the claims recite that the “access network compris[es] an electronic content source” for subscribers, and “the electronic content source provides an Internet Protocol Television (IPTV) service.” (Ex. 2 at claims 1, 9-11, 14.) The specification confirms that subscribers access the IPTV service through a connection with their Internet Service Provider—*i.e.*, through the access network. For example, referring to Figure 1, the specification explains that “*within the access communication network 16... an ISP provides an Internet Protocol TV (IPTV) service as a source of electronic content.*” (*Id.* at 5:19-21.) Referring to Figure 2, the specification states that “[a]n electronic content source could also or instead be implemented within the access network 24. *An ISP might host its own IPTV service*, for example.” (*Id.* at 7:42-44.)

Second, the specification explains that ISPs are “access network operators” (*id.* at 15:8) and they implement access networks to provide their subscribers with Internet access. For example, “FIG. 1 is typical of an Internet service system, wherein an Internet Service Provider (ISP) implements switches, routers, and/or other network equipment as *the access communication network 16 to provide its subscribers with access to the Internet as the core communication network 18.*” (*Id.* at 5:11-16.) Referring to Figure 2, the specification states that “[i]nteractions between the subscriber 22 and the electronic content source 58 are *enabled by the access communication link 26 through the access network 24. The access network 24 might*

provide the subscriber 22 with access to the Internet, for example.” (Id. at 7:61-65.) Figure 2 shows this interaction, demonstrating how “access network 24” connects “subscriber 22” to “electronic content source 58.” (*Id.* at Fig. 2.)

Third, the extrinsic evidence also shows that Google’s construction is consistent with a person of ordinary skill in the art’s understanding of the term “access network.” (Ex. 7 (defining “access network” as “[a] network that connects directly to the end user or customer”).)

In sum, WSOU’s argument that Google is restricting “access network” to a connection between a subscriber and their ISP is baseless. (Dkt. 33 at 19.) As explained above, the specification and extrinsic evidence fully supports Google’s construction and confirms that it is the plain and ordinary meaning of “access network.” Even the disclosures related to Figure 1, which WSOU relies on exclusively, support Google’s construction. (Ex. 2 at 5:11-23 (analyzed above).) And contrary to WSOU’s argument (Dkt. 33 at 14), the patent contains several references to “Internet Service Provider” and “ISP,” which WSOU ignores. (Ex. 2 at 5:12 (“Internet Service Provider”), 5:12, 5:19, 7:43, 7:65, 9:49, 12:11, 15:48, 15:56 (all discussing “ISP”).)

C. “a behavioral information collector operable to monitor communication traffic exchanged with a communication network subscriber over an access communication link” (claims 1, 9, 10)

D. “the behavioral information collector being configurable to collect from any of a plurality of types of communication traffic in the monitored communication traffic behavioral information indicative of behavior of the subscriber in using the access communication link” /

“the behavioral information collector operable to . . . collect from the monitored communication traffic behavioral information indicative of behavior of the subscriber in using the access communication link” /

“the behavioral information collector being configurable to collect the behavioral information from any of a plurality of types of communication traffic in the monitored communication traffic” (claims 1, 9, 10)

Google's Construction	WSOU's Construction
<p><u>Term 3:</u> Subject to 35 U.S.C. § 112, ¶ 6.</p> <p>Function: “monitor communication traffic exchanged with a communication network subscriber over an access communication link”</p> <p>Structure: none (indefinite)</p>	<p>plain and ordinary meaning</p>
<p><u>Term 4:</u> Subject to 35 U.S.C. § 112, ¶ 6.</p> <p>Function: “collect from any of a plurality of types of communication traffic in the monitored communication traffic behavioral information indicative of behavior of the subscriber in using the access communication link”</p> <p>Structure: none (indefinite)</p>	<p>plain and ordinary meaning</p>

These terms involve two disputes. The first dispute is whether recitation of “a behavioral information collector *operable to...*” and “the behavioral information collector being *configurable to...*” perform various functions invokes Section 112, ¶ 6. The second is whether the '806 patent discloses sufficient structure to perform the recited functions of “monitor[ing] communication traffic” and “collect[ing] behavioral information from that traffic.”

Regarding the first dispute, Section 112, ¶ 6 applies when the claim term “fails to recite sufficiently definite structure or else recites function without reciting sufficient structure for performing that function.” *Williamson*, 792 F.3d at 1349. Importantly, “[t]he question is not whether a claim term recites any structure but whether it recites sufficient structure—a claim term is subject to § 112(f) if it recites function without reciting sufficient structure for performing that function.” *Egenera, Inc. v. Cisco Sys., Inc.*, 972 F.3d 1367, 1374 (Fed. Cir. 2020). Moreover, “[i]t is not enough that a means-plus-function claim term correspond to every known way of achieving the claimed function; instead, the term must correspond to ‘adequate’

structure in the specification that a person of ordinary skill in the art would be able to recognize and associate with the corresponding function in the claim.” *Synchronoss Techs., Inc. v. Dropbox, Inc.*, Case No. 19-2196, slip op. at 15 (Fed. Cir. 2021). Here, neither the claims nor the specification conveys sufficient structure to perform the functions recited in the disputed terms.⁵

First, neither the phrase “behavioral information collector” nor the term “collector” identifies any definite structure in the claim language. “Collector” is a general nonce term and the modifier “behavioral information” merely describes the type of information to be collected. The modifier does not connote any structure for the term “collector.” Courts routinely reject modifiers that, like “behavioral information,” add no structure to the claims. *Williamson*, 792 F.3d at 1351; *Media Rights*, 800 F.3d at 1373; *Welker Bearing*, 550 F.3d at 1096-97; *Rain Computing, Inc. v. Samsung Elecs. Co.*, 2020 WL 708125, at *4 (D. Mass. 2020). Thus, “behavioral information collector” has no structural significance.

Second, the claim language that follows “a behavioral information collector *operable to* . . .” and “the behavioral information collector being *configurable to* . . .” describes the behavioral information collector purely in terms of what it *does* – i.e., “*monitor communication traffic* exchanged with a communication network subscriber over an access communication link” and “*collect from any of a plurality of types of communication traffic in the monitored communication traffic behavioral information* indicative of behavior of the subscriber in using the access communication link” – not what it is structurally.

Contrary to WSOU’s cursory argument (Dkt. 33 at 20), the language “a behavioral

⁵ Google addresses these terms together for judicial efficiency because WSOU raises the same arguments to all the terms. (Dkt. 33 at 20-22.)

information collector” is insufficient structure for performing the claimed functions. WSOU has not cited any evidence showing that a POSITA would have been familiar with the term “behavioral information collector” or understand that term to connote any, much less sufficient, structure. Instead, WSOU cites to inapposite cases. For example, in *Amdocs (Israel) Ltd.* and *Yodlee, Inc.*, no Section 112, ¶ 6 issues were presented to, or considered by, the Court regarding the term “data collector” in *Amdocs* or the terms “collection function” and “collector function” in *Yodlee, Inc.* Moreover, the question is whether the claim terms in *this* case recite sufficient structure for performing the claimed functions. They do not.

As to the second dispute, WSOU does not even attempt to identify any corresponding structure in the specification--because there is none. Indeed, the specification expressly acknowledges that “[g]iven the broad range of possible implementations of many of the components of the system 20, *these components are described herein primarily in terms of their functions.*” (Ex. 2 at 7:3-5.) Such is the case for the “behavioral information collector” component, which the specification describes only in generalized, functional terms. For example, the specification states that “[a] behavioral information collector *might be a standalone network element*” and that “[t]he collection function of the behavioral information collector ... could be implemented as an extended Deep Packet Inspection (DPI) platform” or “management software.” (Ex. 2 at 6:32-39.) The description of the DPI platform is purely functional in nature and provides no detail about how it should be implemented or what structure it should take. (*Id.* at 6:39-47 (discussing DPI platform in terms of its functions), 2:66-3:3 (same).) The specification also contains no detail about the “management software.” The specification then adds more functional language, stating that “[t]he main function of a behavioral information collector ... *is to monitor all communication traffic flows of the subscriber 22.*” (*Id.* at 8:14-17.)

Finally, although the “behavioral information collector” appears in Figure 2 of the ‘806 patent, it is depicted merely as an empty box devoid of details about any structure or algorithm. (*Id.* at Fig. 2 (boxes 28 and 34.)

All told, the specification describes the “behavioral information collector” in the same way that the claims do: functionally and without any structure. That is insufficient. “Under § 112 ¶ 6, a patentee is only entitled to ‘corresponding structure ... described in the specification and equivalents thereof,’ not any device capable of performing the function.” *Ergo Licensing, LLC v. CareFusion 303, Inc.*, 673 F.3d 1361, 1364 (Fed. Cir. 2012); *Synchronoss Techs., Inc.*, Case No. 19-2196, slip op. at 15.

III. THE ‘681 PATENT (CASE NO. 6:20-CV-00582)

The ‘681 patent relates to digital cameras that logically separate an area of interest into a plurality of parts, assign a focus value mask to each part, and then execute an autofocus algorithm. (Ex. 8 at Abstract.)

A. “autofocus algorithm” (all claims)

Google’s Construction	WSOU’s Construction
instructions to automatically adjust a lens to achieve focus	plain and ordinary meaning

Google’s construction of “autofocus algorithm” fully reflects the term’s established meaning as shown by contemporaneous dictionaries and how the inventors themselves used the term throughout the ‘681 patent. By contrast, without offering any construction, WSOU’s arguments drain all meaning from the words “autofocus” and “algorithm.” That, however, is an improper role of claim construction or ascribing a “plain and ordinary meaning.” In such circumstances, the Supreme Court instructs that “the construction of a patent, *including terms of art within its claim*, is not for a jury but exclusively for the court to determine.” *Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 574 U.S. 318, 321 (2015). That is particularly true where, as here, the

parties agree that the operative meaning is from twelve years ago. (Dkt. 33 at 23-24.)

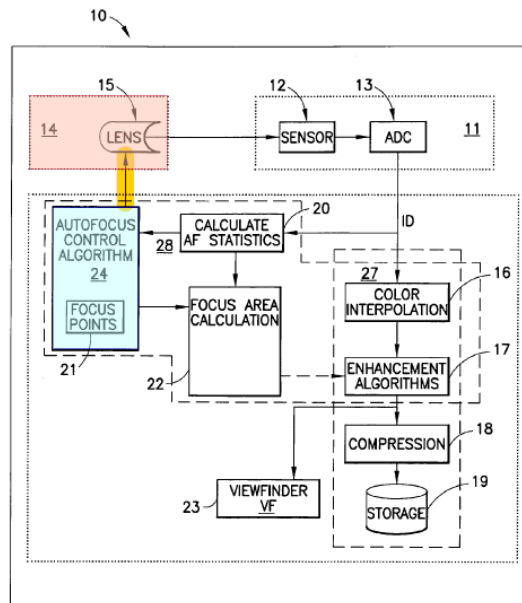
Contemporaneous dictionaries demonstrate that “autofocus” requires automatically adjusting a camera lens to provide focus:

- “**automatic focus** [optics] A device in a camera or enlarger which automatically keeps the objective lens in focus through a range of magnification.” (Ex. 9 at GOOG-WSOU582-CC-000016.)
- “**automatic focus** a system in a camera which automatically adjusts the lens so that the object being photographed is in focus...” (Ex. 10 at GOOG-WSOU582-CC-000010.)
- “**autofocus** a device that focuses a lens, camera, etc. automatically.” (Ex. 11 at GOOG-WSOU582-CC-000024.)
- “**autofocus** a device in a camera that automatically adjusts the focusing.” (Ex. 12 at GOOG-WSOU582-CC-000020.)

The specification fully aligns with these definitions, describing digital imaging cameras having “a lens [that] is provided for purposes of focusing a subject image” that is done by “*controlling a focusing of the lens.*” (Ex. 8 at 1:32-36.) The ’681 patent explains that the purpose of the autofocus (“AF”) feature is “to allow a user of the camera system to obtain focus ... *without manually adjusting the lens focal length.*” (*Id.* at 1:51-54.) The ’681 patent further explains that a camera circuit includes an image sensor “together with *movable (or otherwise focal-length adjustable) lenses.*” (*Id.* at 4:44-46.) According to the ’681 patent, “focusing” the lens “can be performed automatically or also by the end user, who can manually *adjust the focus*, if there is, for example, a manually adjustable focus disc (mechanical focus control) in the camera.” (*Id.* at 4:65-5:4.)

The ’681 patent thus makes clear that the “focusing operations ... *include the movement of lenses*, in order to maximize the statistical image sharpness.” (*Id.*) It is within these mechanical bounds of lens movement that the “autofocus algorithm” operates. Indeed, the specification stresses that the “output” of the autofocus algorithm is “control data ... *for the*

adjustment mechanism 14 of the set of lenses.” (*Id.* at 5:26–32.) And this “control data is used to move the set of lenses” in a way that the primary focus-point object is “imaged precisely and sharply.” (*Id.*) Accordingly, “when the lens moves between a far mechanical end and a near mechanical end, such as during a focusing operation, a small zooming of the image window occurs.” (*Id.* at 7:3–7:6.) Figure 1 confirms that the autofocus algorithm (in blue) sends information (highlighted arrow) to adjust the lens (in red):



Google’s construction accords “autofocus algorithm” its commonly understood meaning consistent with the term’s usage throughout the intrinsic evidence. Importantly, WSOU never suggests that moving/adjusting the lens is not the ordinary meaning of autofocus. Instead, WSOU raises a series of arguments that render the term “autofocus algorithm” bereft of any meaning.

First, WSOU argues that no meaning should be assigned to the term “algorithm,” that “instructions” are not an “algorithm,” and that Google attempts to substitute these two terms. (Dkt. 33 at 24.) Contrary to WSOU’s assertion, Google does not “rewrite” the claim term. Google’s construction gives meaning to the term “algorithm” within the context of the phrase

“autofocus algorithm” and the ’681 patent. The abstract—upon which WSOU places much weight—describes “executing an autofocus algorithm.” The same is true with the claims, which recite “executing an autofocus algorithm.” This demonstrates that the algorithm is executable instructions. The specification likewise discloses that the blocks in Figure 1 represent “a *combination of program steps* ... for performing the specified task.” (Ex. 8 at 10:22-26.) In any event, to reduce the number of issues before the Court, Google is amenable to a construction that refers to an algorithm instead of instructions: “an algorithm to automatically adjust a lens to achieve focus.”

Second, WSOU contends that Google’s construction carves out instances where the “autofocus algorithm” determines that no adjustment of the lens is needed. (Dkt. 33 at 25.) This argument is meaningless. In WSOU’s scenario, the algorithm (instructions) does not adjust the lens, and an instruction of no adjustment in the focusing operation is still an instruction.

Third, WSOU relies on the abstract’s mention of “autofocus algorithm” as somehow indicating that the term requires no construction. (Dkt. 33 at 23-24.) Neither the regulation nor the MPEP sections that WSOU cites even remotely support such a broad claim-construction exclusionary rule. Moreover, the Federal Circuit instructs that when a term’s ordinary meaning is disputed, “claim construction requires the court to determine what claim scope is appropriate in the context of the patents-in-suit.” *O2 Micro*, 521 F.3d at 1361. Simply put, “[w]hen the parties present a fundamental dispute regarding the scope of a claim term, it is the court’s duty to resolve it.” *Id.* at 1362. That is the case here, as WSOU attacks Google’s construction of the ordinary meaning of “autofocus algorithm” without stating what WSOU believes such meaning entails. In such circumstances, “the court’s obligation is to ensure that questions of the scope of the patent claims are not left to the jury. In order to fulfill this obligation, the court must see to it

that disputes concerning the scope of the patent claims are fully resolved.” *Every Penny Counts, Inc. v. American Express Co.*, 563 F.3d 1378, 1383 (Fed. Cir. 2009)

Lastly, WSOU argues that Google’s construction is inconsistent with the specification because it is unclear what type of “focus” is to be achieved. (Dkt. 33 at 24.) WSOU simply attempts to sow confusion where none exists. Google’s construction does not purport to define what “focus” is intended to be. As WSOU recognizes, the ’681 patent’s clear objective is achieving focus. In whatever capacity a device incorporating the alleged invention ascribes as the desired focus, Google’s construction reflects that the algorithm adjusts the lens to achieve that focus. “*What*” is the desired focus differs from “*how*” that focus is achieved. The former sets the goal (what specified lens position is meant to be achieved), and the latter sets the algorithm/instructions to achieve that goal.

B. “second part in between the first part and the second part” (all claims)

Google’s Construction	WSOU’s Construction
indefinite	plain and ordinary meaning

Clear precedent and straightforward facts govern this issue. The law is well settled that nonsensical claims are indefinite. *Horizon Pharma, Inc. v. Dr. Reddy’s Labs. Inc.*, 2021 WL 48428, at *4 (Fed. Cir. 2021) (“One circumstance in which claims are indefinite is where the claims, as properly construed, are nonsensical.”). Here, the asserted claims recite “*a second part in between the first part and the second part*,” which is nonsensical on its face because it defines a part in reference to itself. Simple logic dictates that a “second part” cannot be “in between” a first part and *itself*. Yet that is precisely what the claims require. As the Federal Circuit aptly explains, this claim language is “nonsensical in the way a claim to extracting orange juice from apples would be, and [is] thus indefinite.” *Columbia Univ. v. Symantec Corp.*, 811 F.3d 1359, 1366–67 (Fed. Cir. 2016).

This issue does not involve a typographical mistake or printing error. WSOU concedes that the inventors affirmatively used the phrase “a second part in between the first part and the second part” throughout the intrinsic record. (Dkt. 33 at 21-22.) First, each independent claim recites “a second part in between the first part and the second part.” (Ex. 8 at claims 1, 9, 16 and 24.)

Second, just like the claim language, the specification uses the same phrase—“a second part in between the first part and the second part”—in the same context. (*Id.* at 11:46-53.)

Claims	Specification
“[W]here the plurality of parts of the at least one sub-window of interest comprise a first part closest to a center of the at least one sub-window of interest, a third part farthest from the center of the at least one sub-window of interest, and <i>a second part in between the first part and the second part</i> , where the first part has a weighted focus value of Value ₁ , the second part has a weighted focus value of Value ₂ , and the third part has a weighted focus value of Value ₃ .” (<i>Id.</i> at 12:60–13:1.)	“[F]or a case where the plurality of parts of the at least one sub-window of interest comprise a first part closest to the center of the sub-window of interest, a third part farthest from the center of the sub-window of interest, and <i>a second part in between the first part and the second part</i> , where the first part has a weighted focus value of Value ₃ , the second part has a weighted focus value of Value ₂ , and the third part has a weighted focus value of Value ₁ .” (<i>Id.</i> at 11:46–53.)

Third, as WSOU acknowledges, the prosecution history shows that the inventors purposefully used the phrase “a second part in between the first part and the second part.” The originally-filed claims 8 and 24 recited that exact language. (Ex. 13 at WSOU_582_8238681-00115, -120.) After the Examiner rejected the independent claims, the inventors amended the claims to recite “a second part in between the first part and the second part.” (*Id.* at -025-032.) The inventors further explained that the “independent claims ... have been amended to include similar features of allowed claim 8.” (*Id.* at -034.) The Examiner then allowed the claims.

“The motto, ‘beware of what one asks for,’ might be applicable here.” *Liebel-Flarsheim Co. v. Medrad, Inc.*, 481 F.3d 1371, 1380 (Fed. Cir. 2007). Having repeatedly used the phrase “a second part in between the first part and the second part,” the patentee must be held to this

language. And precedent establishes that nonsensical or self-contradictory language renders claims indefinite. *See, e.g., Synchronoss Techs., Inc. v. Dropbox, Inc.*, Case No. 1902196, slip op. at 12-13 (Fed. Cir. Feb. 12, 2021) (holding claims indefinite because “the asserted claims ... are nonsensical and require an impossibility—that the digital medial file contain a directory of digital media files”); *Columbia Univ.*, 811 F.3d at 1367 (“The claims are nonsensical ... and are thus indefinite.”); *Allen Eng. Corp. v. Bartell Indus., Inc.*, 299 F.3d 1336, 1349 (Fed. Cir. 2002) (claims indefinite because of contradictory language that recited “perpendicular” rather than “parallel”); *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357 (Fed. Cir. 1999) (claims indefinite when the “interpretation results in a nonsensical construction of the claim as a whole”). The same reasoning yields the same result in this case: the asserted claims are nonsensical and therefore indefinite.

While urging a “plain and ordinary meaning,” WSOU in effect asks the Court to *sub silentio* rewrite the language such that the claims would be applied as though they recited “in between *the boundary of* the first part and *outer boundary of* the second part.” (Dkt. 33 at 26.) This argument fails for several reasons. To start, that is not what the claim language says. The law is unequivocal that courts cannot rewrite claims, whether by express construction or through “plain and ordinary meaning” that deviates from the *actual* claim language. “[W]e do not redraft claims to contradict their plain language in order to avoid a nonsensical result.” *Haemonetics Corp. v. Baxter Healthcare Corp.*, 607 F.3d 776, 782 (Fed. Cir. 2010); *see Chef Am.*, 358 F.3d at 1374 (Fed. Cir. 2004) (“Even a nonsensical result does not require the court to redraft the claims.”). Moreover, even WSOU’s attempt to redraft the language cannot avoid indefiniteness: A second part between the first part “and the outer boundary of the second part” remains nonsensical because it still requires the “second part” to be between itself.

Finally, WSOU asserts that the claims are not indefinite because the Examiner allowed the claims without a rejection under Section 112, ¶ 2. (Dkt. 33 at 27.) However, “if the Court were to accept this argument, no party could ever raise an indefiniteness challenge because every claim term ever held indefinite was originally approved by a patent examiner.” *Arctic Cat Inc. v. Bombardier Prod. Inc.*, 2016 WL 6832623, at *16 (D. Minn. 2016).

C. “means for assigning a focus value mask to each of the plurality of parts of the at least one sub-window” (claim 24)

Google’s Construction	WSOU’s Construction
indefinite	<i>See, e.g.</i> , processor (3:7–9; 10:18–22; 10:39–51; 10:57–63; 11:58–12:3); 5:10–13; FIG. 3; 8:3–52; 11:2–4.

The sole dispute is whether ’681 patent discloses corresponding structure to perform the function of “assigning a focus value mask to each of the plurality of parts of the at least one sub-window.” (Dkt. 33 at 28.) The patent does not do so, and measured against binding precedent, WSOU’s cited passages fail to identify the necessary structure.

WSOU’s citations to the specification can be organized into two groups. The first group consists of three passages—5:10-13, 11:2-4, and 8:36-52—none of which disclose an algorithm to perform the claimed function. The first two passages merely repeat the recited function without providing any structural detail to carry out that function. (Ex. 8 at 5:10-13 (“a circuit for defining and assigning focus value masks for sub-windows of interest in accordance with the exemplary embodiments of the invention”); 11:2-4 (“assigning a focus value mask to each of the plurality of parts of the at least one sub-window”).) “This type of purely functional language, which simply restates the function associated with the means-plus-function limitation, is insufficient to provide the required corresponding structure.” *Noah Sys., Inc. v. Intuit Inc.*, 675 F.3d 1302, 1317 (Fed. Cir. 2012); *see Uniloc USA, Inc. v. Samsung Elecs. Am., Inc.*, 809 F. App’x 863, 865 (Fed. Cir. 2020) (collecting cases holding same: “Merely describing the results

of an unspecified algorithm in this manner, however, is not sufficient to satisfy the requirements of § 112 ¶ 6.”).

The third cited passage of the first group has no relation to the claimed function of “assigning a focus value mask to each of the plurality of parts of the at least one sub-window.”

The passage states:

[I]n accordance with the illustration of FIG. 3, we propose *to compute the resulting focus value in overlapping sub-WOIs* is computed as a weighted calculation such as a sum of focus values from the three different masks. In a non-limiting embodiment of the invention the weight for the inner Mask 3 (360) is maximal and is represented by Value3, the weight for the Mask 2 (350) is represented by Value2, and the weight for the outer Mask 1 (340) is represented by Value1. According to the exemplary embodiments of the invention the *focus value for a sub-WOI* such as the sub-WOI 310 *may then be calculated* as:

$$FV_{\text{sub-WOI}} = \text{Value}_1 * FV_{\text{Mask1}} + \text{Value}_2 * FV_{\text{Mask2}} + \text{Value}_3 * FV_{\text{Mask3}}.$$

Where Value_x represents a value such as a rational number or decimal value assigned to a corresponding focus value mask.

(Ex. 8 at 8:36-52.) Tellingly, even WSOU’s brief never discusses this passage, and for good reason. Nothing in this passage describes an algorithm for assigning focus value masks. Instead, by its own words, this passage describes computing a focus value—not “assigning a focus value mask” as claimed—from overlapping sub-windows—rather than “parts of at least one sub-window” as claimed. At most, this passage mentions using focus value masks as inputs for a calculation, but that is not the claimed function. As the Federal Circuit emphasizes, structure “is corresponding *only if* the specification ... *clearly links or associates* that structure to the *function recited in the claim.*” *Med. Instrumentation & Diagnostics Corp. v. Elekta AB*, 344 F.3d 1205, 1211 (Fed. Cir. 2003); *Digital Retail Apps, Inc.*, 2020 WL 376664, at *3 (same).

WSOU’s second group of citations simply refer to the fact that “embodiments of this invention may be implemented by *computer software executable by a data processor.*” (Ex. 8 at

10:18-22.) That is insufficient structure as a matter of law. The Federal Circuit “consistently require[s] that the structure disclosed in the specification be more than simply a general purpose computer or microprocessor.” *Aristocrat*, 521 F.3d at 1333. The disclosed structure must be “the special purpose computer programmed to perform the disclosed algorithm.” *WMS Gaming*, 184 F.3d at 1349. It is equally “well settled ‘that simply disclosing software [] ‘without providing some detail about the means to accomplish the function is not enough.’” *Function Media, L.L.C. v. Google, Inc.*, 708 F.3d 1310, 1318 (Fed Cir. 2013); *Digital Retail*, 2020 WL 376664, at *4 (same).

D. “a processor configured to . . .” (claim 16)

Google’s Construction	WSOU’s Construction
construed as means-plus-function limitations	plain and ordinary meaning

The dispute is whether the limitations in claim 16 reciting a “processor configured to” perform various functions invoke Section 112, ¶ 6, and therefore should be construed like the “means for” limitations in claim 24 which recite identical functions. For this issue, the essential inquiry is “whether the words of the claim are understood by [POSITAs] to have a sufficiently definite meaning as the name for structure.” *Williamson*, 792 F.3d at 1348. Though absence of the word “means” creates a rebuttable presumption that a term is not a means-plus-function limitation, Section 112, ¶ 6 applies when the claim term: (i) “fails to recite sufficiently definite structure,” or (ii) “recites function without reciting sufficient structure for performing that function.” *Id.* at 1349.

As a threshold matter, WSOU’s primary argument rests on the erroneous premise that there is a categorical rule that the term “processor” avoids means-plus-function treatment. This Court and other districts make clear that whether the term “processor” invokes Section 112, ¶ 6 requires a case-specific analysis turning on the particular disputed claims and patent. *See, e.g.*,

Dyfan, 6:19-cv-179-ADA, Dkt. 57 at 20 & n.4; *St. Isidore Research, LLC v. Comerica Inc.*, 2016 WL 4988246, at *14 (E.D. Tex. 2016) (construing “processor configured to” as a means-plus-function limitation because the processor “is defined only by the function that it performs”). As this Court instructs, applicants cannot “simply recite *two nonce words*—‘processor’ and ‘code’—together in the claim in order to essentially write the claim in a means-plus-function format without being subject to § 112, ¶ 6.” *Dyfan*, Dkt. 57 at 20 n.4. The same holds true here.

The intrinsic record establishes that the phrase “processor configured to” in claim 16 does not provide sufficient structure for performing the claimed functions. First, claim 16 is drafted in the same format as traditional means-plus-function claims with the phrase “processor configured to” simply substituted for the phrase “means for.” The claim language following the “processor configured to” phrase is purely functional without reciting any structure for how to perform the claimed functions. *See, e.g., Joao Control & Monitoring Sys., LLC v. Protect Am., Inc.*, 2015 WL 4937464, at *9 (W.D. Tex. 2015) (construing “processing device” as a means-plus-function term because the claim “employs purely functional claiming without reciting sufficient structure in the claims to perform the function described”). Indeed, WSOU acknowledges that the “processor configured to” terminology is the only difference between claims 16 claim 24. (Dkt. 33 at 30.) Accordingly, the “processor configured to” phrase “does not provide any indication of structure because it sets forth the same black box recitation of structure for providing the same specified function as if the term ‘means’ had been used.” *Williamson*, 792 F.3d at 1350.

Second, WSOU’s own constructions confirm that the “processor configured to” phrase does not supply sufficient structure for performing the claimed functions. Regarding claim 24, which recites “means for” performing identical functions, WSOU identifies the corresponding structure as ***a processor and additional algorithms***. (Dkt. 33 at 23.) Given WSOU’s admission

that a processor alone is insufficient structure to perform the functions in claim 24, the same result applies with equal force to claim 16. Simply put, the '681 patent uses the phrase a “processor configured to” as a generic placeholder that—just like “means for”—must be programmed to carry out the claimed functions. And “even assuming [that a processor] connotes some possible structure in the general sense of software, firmware, or circuitry,” it does not “amount[] to sufficient structure for performing the [claimed] function[s].” *Egenera*, 972 F.3d at 1374.

Third, the specification expressly equates the terms “means for” and “processor,” stating that “the means for logically separating, means for assigning, and means for executing *comprises a processor*.” (Ex. 8 at 3:8-9.) Such interchangeable treatment of “processor” and “means for” demonstrates that the patent uses the terms “as synonyms.” *MIT v. Abacus Software*, 462 F.3d 1344, 1354 (Fed. Cir. 2006). WSOU’s own cited cases confirm this point. *See Cypress Lake Software, Inc. v. Samsung Elecs. Am. Inc.*, 382 F. Supp.3d 586, 615-16 (E.D. Tex. 2019) (“By using this parallel language, [POSITAs] would understand that the [patent] uses the terms ‘code for’ and ‘means for’ as synonyms. Accordingly, Defendants have rebutted the presumption that § 112, ¶ 6 does not apply to the disputed ‘code for’ terms.”).

The remainder of the specification uses the term “processor” as a general, catch-all label for whatever may perform various functions. The specification mentions processors only by reference to the claimed functions (*id.* at 2:48-65), or as devices for executing computer software (*id.* at 10:18-43). In the same vein, Figure 1 shows box 28 as a collection of black boxes with functional labels. (*E.g.*, Fig. 1 (box 28 consisting of sub-boxes with functional labels such as “autofocus control algorithm 24,” “calculate AF statistics 20,” and “focus area calculation 22”). This disclosure cannot avoid Section 112, ¶ 6 because it “amount[s] to generic terms or black

box recitations of structure or abstractions.” *Egenera*, 972 F.3d at 1373; *see Grecia v. Samsung Elecs. Am., Inc.*, 780 F. App’x 912, 916 (Fed. Cir. 2019) (construing term “customization module” as means-plus-function limitation when the specification provided only a “black box recitation untethered to any specific structure”); *Augme Techs., Inc. v. Yahoo! Inc.*, 755 F.3d 1326, 1338 (Fed. Cir. 2014) (holding that “software code” and “code assembler instructions” [that] are executed” does not provide structure).

Finally, WSOU’s claim-differentiation argument (Dkt. 33 at 30-31) clashes with Federal Circuit precedent. Claim differentiation has little applicability to *independent* claims 16 and 24 because “two claims with different terminology can define the exact same subject matter.” *Curtiss-Wright Flow Control Corp. v. Velan, Inc.*, 438 F.3d 1374, 1380 (Fed. Cir. 2006). To that end, the Federal Circuit instructs that courts must “be[] cautious in assessing the force of claim differentiation in particular settings, *recognizing that patentees often use different language to capture the same invention, discounting it where it is invoked based on independent claims* rather than the relation of an independent and dependent claim.” *Atlas IP, LLC v. Medtronic, Inc.*, 809 F.3d 599, 607 (Fed. Cir. 2015). Further, claim differentiation is not a “hard and fast rule of construction,” and cannot “broaden claims beyond their correct scope.” *Kraft Foods, Inc. v. Int’l Trading Co.*, 203 F.3d 1362, 1368 (Fed. Cir. 2000). That is especially true for assessing whether a term is a means-plus-function limitation because claim differentiation “does not override the requirements of § 112, ¶ 6 when the claim will bear only one interpretation.” *Nomos Corp. v. Brainlab USA, Inc.*, 357 F.3d 1364, 1368 (Fed. Cir. 2004).

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Respectfully submitted,

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CERTIFICATE OF SERVICE

I certify that on February 12, 2021, I served the foregoing by electronic mail on counsel of record.

/s/ Edwin Garcia

Edwin Garcia